Application No.: 10/526,999

Amendment Dated November 8, 2007 Reply to Office Action of July 9, 2007

# **Remarks/Arguments:**

### **Amendments**

To more particularly point out and distinctly claim the subject matter applicants regard as the invention, the claims have been amended to remove "etc" and to use conventional claim terminology. Claims 18-33, drawn to apparatus for introducing impurity, an unelected invention, have been canceled without prejudice to applicants' right to peruse the subject matter of these claims in one or more divisional applications. It is submitted that no new matter is introduced by these amendments.

## Rejection under 35 USC 102

Claims 1-3, 6, 10-13, 16, 17, 34-36, 39, 43-46, 49, and 50 were rejected as anticipated by Mizuno, U.S. Patent 5,851,906 ("Mizuno"). Claims 2 and 3 have been canceled.

As amended, the independent claims each recite that the oxidized film and other film are first removed as the surface treatment to the solid substance with a means for dipping the surface of solid substance in a reductive liquid. Mizuno does not disclose a means for dipping the surface of the solid substrate in a reductive liquid. Office action, page 6, lines 5-10.

Anticipation requires that each and every limitation of the claim be disclosed, either expressly or under principles of inherency, in a single prior art reference. *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Absence from the reference of any claimed limitation negates anticipation. *Rowe v. Dror*, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997). Therefore the rejection of claims 1, 6, 10-13, 16, 17, 34-36, 39, 43-46, 49, and 50 as anticipated by Mizuno should be withdrawn because a means for dipping the surface of solid substance in a reductive liquid is missing from the disclosure of Mizuno.

## First Rejection under 35 USC 103

Claims 4, 5, 14, 15, 37, 38, and 47 were rejected as unpatentable over Mizuno in view of Hymes, U.S. Patent 6,324,715 ("Hymes"). Claim 15 has been canceled.

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The Office cited Hymes for the disclosure of cleaning with ammonia and hydrogen fluoride. Office Action, page 6, lines 11-14. However, in Hymes the cleaning solution is delivered to the core of a brush, where it is absorbed by the brush, and then applied by the brush onto the substrate. Hymes, Abstract. The substrate is not dipped in the cleaning solution.

The Office has not made the *prima facie* case. As discussed above, Mizuno does not disclose Applicants' claimed removal using a means for <u>dipping</u>. The deficiency of Mizuno is not overcome by Hymes. Therefore, combination of the references in the manner indicated by the Office does not produce the invention. For this reason the rejection of claims 4, 5, 14, 37, 38, and 47 as unpatentable over Mizuno in view of Hymes should be withdrawn.

## Second Rejection under 35 USC 103

Claims 7-9, 40-42, and 48 were rejected as unpatentable over Mizuno in view of the English language abstract and translation of JP H07-094427 ("NTT").

NTT was cited for disclosure of a method of doping in which the surface of the solid substance is irradiated with an electromagnetic wave at an energy that is more than the ionization energy of the doping gas. Office action, page 7, lines 10-17.

The Office has not made the *prima facie* case. As discussed above, Mizuno does not disclose a means for dipping the surface of the solid substrate in a reductive liquid. This deficiency is not overcome by NTT. Therefore, combination of the references in the manner indicated by the Office does not produce the invention. For this reason the rejection of claims 7-9, 40-42, and 48 as unpatentable over Mizuno in view of NTT should be withdrawn.

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It is respectfully submitted that the claims are in condition for immediate allowance and a notice to this effect is earnestly solicited. The Examiner is invited to phone applicants' attorney if it is believed that a telephonic or personal interview would expedite prosecution of the application.

Respectfully submitted,

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Conclusion

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